Title: NETWORK TERMINAL OPERATED BY DOWNLOADABLE OPERATING SYSTEM AND OPERATING METHOD THEREOF

## IN THE CLAIMS

Please amend the claims as follows:

- (Previously Presented) A network terminal operated by a downloadable operating system, the network terminal comprising:
  - a power supply to supply power to an element of the network terminal;
- a nonvolatile storage medium to store a basic input/output system (BIOS) that automatically operates upon supplying the power;
- a controller to be initialized by operation of the BIOS to enable a connection between the network terminal and a host computer and downloading a terminal operating system (OS) from the host computer to the network terminal;
- a volatile storage medium to store the terminal OS downloaded from the host computer, the controller being re-initialized by the terminal OS to control the overall operation of the network terminal and being a programmable logic chip instead of a microprocessor or central processing unit (CPU); and
- a communication part to communicate with the host computer, wherein the terminal OS is configured to
  - transmit user inputs at the network terminal to the host computer for execution by an application program on the host computer to provide execution results; and receive a bitmap image from the host computer for display, wherein the execution results are converted into the bitmap image at the host computer.
- (Previously Presented) The network terminal according to claim 1, further comprising: an encoder for encoding the received data; and at least one input/output port to which at least one user interface is connected.
- (Previously Presented) The network terminal according to claim 1, wherein the nonvolatile storage medium is a ROM or a flash memory and the capacity of the nonvolatile storage medium is less than or equal to 512 KB.

- (Previously Presented) The network terminal according to claim 1, wherein the controller is implemented with a programmable SoC (system on a chip).
- (Cancelled)
- (Previously Presented) The network terminal according to claim 1, wherein the volatile storage medium is used as a working memory and is implemented with less than or equal to 8-MB RAM.
- 7. (Previously Presented) The network terminal according to claim 1, wherein each of the network terminal and the host computer is assigned a unique IP address to identify each other to establish communication between the host computer and the network terminal.
- (Original) The network terminal according to claim 1, wherein the nonvolatile storage medium stores a program enabling the network terminal to have a unique IP address.
- (Original) The network terminal according to claim 2, wherein the at least one user interface includes a monitor, a keyboard, a mouse, a speaker, a microphone, a touch screen, a remote control, or other interfaces using a USB port, a serial port or a memory slot.
- (Previously Presented) A method of operating a network terminal with a downloadable operating system, comprising:

supplying power to a network terminal;

checking the network terminal and initializing a controller of the network terminal by using a BIOS of the network terminal that is automatically executed upon supplying the power;

connecting the network terminal with a host computer through a network and downloading a terminal OS from the host computer to the network terminal, under control of the initialized controller.

storing the downloaded terminal OS in a volatile storage medium of the network terminal; and

re-initializing the controller using the terminal OS to control the overall operation of the network terminal, the controller being a programmable logic chip instead of a microprocessor or CPU (central processing unit), the terminal OS for.

communicating a user input provided at the network terminal to the host computer for execution by an application program on the host computer to provide execution results; and

receiving a bitmap image from the host computer for display, wherein the execution results are converted into the bitmap image at the host computer.

## 11. (Cancelled)

- (Currently Amended) The method according to claim 10 [[11]], wherein the controller is
  implemented with a programmable SoC.
- (Previously Presented) The method according to claim 10, further comprising running the
  host computer and connecting the host computer to the network prior to supplying the power.
- 14. (Previously Presented) The method according to claim 13, wherein the host computer is provided with the terminal OS for an operation of the network terminal as well as an OS for operation of the host computer.
- 15. (Previously Presented) The method according to claim 10, wherein each of the network terminal and the host computer is assigned a unique IP address to identify each other to establish communication between the host computer and the network terminal.
- 16. (Previously Presented) The method according to claim 10, wherein executing the user input further comprises:

transmitting a screen background of the host computer in the bitmap image to the network terminal and displaying the transmitted screen background on a monitor connectable to the network terminal.

- 17. (Previously Presented) The method according to claim 16, wherein each of the bitmap images is a 8 bit format or 16 bit format bitmap image and a simple authentication procedure is optionally employed when transmitting the bitmap image.
- 18. (Previously Presented) The method according to claim 16, wherein a display area and colors of the monitor are adjustable upon a user's demand.
- 19. (Previously Presented) The network terminal according to claim 1, further comprising an I/O port connectable to a monitor, and wherein the execution results include an image and the terminal OS provides the image to the I/O port.
- 20. (Previously Presented) The network terminal of claim 1, wherein all applications programs are provided on the host computer and all user inputs for an application program are transmitted to the host computer for execution on the host computer.
- 21. (Previously Presented) The network terminal according to claim 1, wherein the volatile and non-volatile memory of the network terminal excludes any application programs, the terminal OS being to communicate user input to the host computer where the application programs are provided.
- 22. (Previously Presented) A system comprising:
  - a host computer including
    - a plurality of application programs;
    - an operating system to run the application programs; and
    - a terminal operating system (OS);
- a plurality of network terminals, each network terminal requiring the terminal OS to operate; and
- a network to connect the plurality of network terminals to the host computer, wherein each network terminal comprises:

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a power supply to supply power to an element of the network terminal;

a nonvolatile storage medium to store a basic input/output system (BIOS) that automatically operates upon supplying the power;

a controller to be initialized by operation of the BIOS to enable a connection between the network terminal and the host computer and downloading the terminal OS from the host computer to the network terminal;

a volatile storage medium to store the terminal OS downloaded from the host computer, the controller being re-initialized by the terminal OS to control the overall operation of the network terminal and being a programmable logic chip instead of a microprocessor or CPU (central processing unit); and

a communication part to communicate with the host computer, wherein the terminal OS is configured to

transmit user inputs at the network terminal to the host computer for execution by the application programs to provide execution results, the applications programs being stored and executed only at the host computer; and

receive bitmap images from the host computer for display, wherein the execution results are converted into the bitmap image at the host computer.

23. (Previously Presented) The network terminal according to claim 22, further comprising an I/O port connectable to a monitor, and wherein the execution results include an image and the terminal OS provides the image to the I/O port.

## 24. (Previously Presented) A method comprising:

executing a basic input/output system (BIOS) automatically upon powering up a network terminal device, the BIOS initializing a controller of the network terminal and establishing a network connection to a host computer;

receiving a terminal operating system (OS) from the host computer and running the terminal OS on the network terminal, the controller being re-initialized by the terminal OS to control the overall operation of the network terminal, the controller being a programmable logic chip instead of a microprocessor or CPU (central processing unit);

communicating all user inputs requiring execution by an application program, the applications program being stored and executed only at the host computer;

receiving bitmap images including execution results from the host computer; and

providing the bitmap image to a monitor to display the execution results, the monitor being connectable to the network terminal.

- (Previously Presented) The method according to claim 24, wherein the images are bit map images.
- (Previously Presented) The method according to claim 24, wherein the terminal OS is stored in and run from volatile memory of the network terminal and operates on a programmable SoC (system on a chip).